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United States Patent [19]**Just et al.**[11] **Patent Number:** **5,232,444**[45] **Date of Patent:** **Aug. 3, 1993**[54] **DILATATION CATHETER**

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604/264, 265, 280, 51-54[56] **References Cited****U.S. PATENT DOCUMENTS**

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Primary Examiner—John D. Yasko*Attorney, Agent, or Firm*—Peter K. Kontler[57] **ABSTRACT**

A catheter for dispensing medication into a body passage or cavity has a hollow shaft and an elongated, inflatable and deflatable member at one end of the shaft. The shaft functions to permit inflation and deflation of the elongated member. The elongated member, which serves as a carrier for the medication, has an intermediate portion centrally located between the ends of the elongated member and a lateral portion on either side of the intermediate portion. Each of the lateral portions extends from the intermediate portion to a respective end of the elongated member. The intermediate portion is perforate to permit the medication to be forced out of the elongated member and into a body passage or cavity when the elongated member is subjected to pressure during inflation. The lateral portions are imperforate so that they can serve as seals upon coming into contact with body tissue as the elongated member is inflated.

33 Claims, 4 Drawing Sheets